ENVIRONMENTAL CONSERVATION
Contents of Volume 20, 1993

Nr 1 — Spring 1993

Editorial Section:

Notice: *Publications: Available or Forthcoming* 2
Editorial: *Introducing Biosphere Clubs* 3
Guest Editorial: *Amazonia Never to be Revisited?*, by Professor Richard Evans Schultes 4
Guest Comment: *Biodiversity and the Challenge of National Borders*, by Dr Arthur H. Westing 5–6
Guest Comment: *Ecotechnology and Rural Employment*, by Dr Monkombu S. Swaminathan 6–7
Announcement: *Offprints and Reprints from* Environmental Conservation 8

Main Papers:

Tropical Forests: The Main Deforestation Fronts, by Professor Norman Myers (map and 3 tables) 9–16
A Revisionist View of Tropical Deforestation and Development, by Dr Michael R. Dove (2 figs) ..... 17–24 & 56
Park–People Relations in Kosi Tappu Wildlife Reserve, Nepal: A Socio-economic Analysis, by Dr Joel T. Heinen (2 figs and 6 tables) 25–34
Soil Compaction as a Constraint to Tree Growth in Tropical and Subtropical Urban Habitats, by Dr Chi Yung Jim (3 figs and 7 tables) 35–49
Incentives for Private Forestry: The Case of the Republic of Ireland, by Gillian Gairdner (4 figs and 2 tables) 50–56
Conservation of Habitats for Shrubsteppe Birds, by Carol A. Schuler, Dr William H. Rickard & Glen A. Sargeant (6 figs and 4 tables) 57–64
Wildlife and Reclamation Ecology: Rabbit Middens on Seeded Limestone Quarry-spoil, by Dr Jean M. Dixon & Dr David J. Hambler (9 figs and 5 tables) 65–73

Short Communications & Reports:

Biosphere 2 — A New Approach to Experimental Ecology, by Mark Nelson & William F. Dempster 74–5
Revision of Map of Ecoregions of the World, by Professor Vladimir N. Bashkin & Dr Robert G. Bailey 75–6
Ageing Bamboo Culms to Assess Bamboo Population Dynamics in Panda Habitat, by Dr Alan H. Taylor & Qin Zisheng (3 figs) 76–9
Recovery of Wastes for Recycling in Beijing, by Shi Yang & Dr Christine Furedy (fig. and table) 79–82

Notes, News & Comments:

Business Charter for Sustainable Development: Principles for Environmental Management, International Chamber of Commerce 82–3
International Chamber of Commerce (ICC) Code on Environmental Advertising, by International Chamber of Commerce 83–4
The Nairobi Code for Communication on Environment and Development 85
Geneva to Host Biodiversity Convention Secretariat 85
Field Studies Council, by James Hindson 85–6
Training Workshop on Environmental Economics and Policy Analysis, by Dr Theodore Panayotou 87
Stockholm Environment Institute, by Dr Arno Rosemarin 87–8
Richard Spruce (1817–93), Botanist and Explorer, by Professor Mark R.D. Seaward 88

Conferences & Meetings:

Reports by Jeffrey A. McNeely, Professor Vladimir A. Nikulin & Docent J.E. Sinitsina, Dr Walter Leal Filho, Professor Makoto Numata, and Nicholas Polunin; *Important Prospects* by Dr Arun Prakash and Dr Walter Leal Filho 89–92

Reviews & Notices:

Book Reviews by Professor Richard Evans Schultes (2), Dr Florencia Montagnini, Dr Michael B. Usher, and Dr Colin Clark; *Notices of Books* by Peter Stone and Johan Holmberg, Koy Thomson & Lloyd Timberlake 03–6

Nr 2 — Summer 1993

Editorial Section:

Editorial: *Obscure Can be Supreme: A Double Lesson from the Stratospheric Ozone Shield* 97
Notice: Confidential Awards Committee: 'Best Paper' Prize(s) for 1992 98
Guest Comment: *Human Rights and the Environment*, by Dr Arthur H. Westing 99–100
The Foundation for Environmental Conservation: Origin, Objectives, and 1992 Report & Prospects 101–5
Updated Notice: *Publications: Available or Forthcoming* 106
Errata 121

Main Papers:

The Silver Jubilee of MAB and Its Revival, by Dr Michel Batisse (4 figs) 107–12
Warfare, National Sovereignty, and the Environment, by Dr R. Paul Shaw (fig.) 113–21
Can Hydro-reservoirs in Tropical Moist Forests be Environmentally Sustainable?, by Dr Robert J.A. Goodland, Dr Anastacio Juras & Dr Rajendra Pachauri (4 tables) 122–30
A Strategy for Conserving the Biodiversity of the Uttara Kannada District in South India, by Dr R.J. Ranjit Daniels, M.D. Subash Chandran & Dr Madhav Gadgil (2 figs and 4 tables) 131–8
Role of Nepal's Royal Chitwan National Park in Meeting the Grazing and Fodder Needs of Local People, by Dr Uday R. Sharma & Professor William W. Shaw (3 figs and 3 tables 139–42
Effect of Saline Irrigation on Early Growth of Eucalyptus gomphocephala *and* Acacia saligna, by Jennyfer Haas (6 figs and 8 tables) ..... 143–8 & 162
Recreational Use, Valuation, and Management, of Killer Whales (Orcinus orca) on Canada's Pacific Coast, by Dr David A. Duffus & Dr Philip Dearden (4 figs and 2 tables) 149–56
Struggling to Save Malaysia's Endau-Rompin Rain Forest, 1972–92, by Dr S. Robert Aiken (fig.) 157–62

Short Communications & Reports:

Balcony Treelet Observations and Some Hunches, by Nicholas Polunin (3 figs) 163–4
Pastoralism and Plant Conservation: The Valley of Flowers Dilemma, by Dr Gopal S. Rawat & Vinod K. Uniyal (fig. (map)) 164–7
Will Guatemala's Juniperus–Pinus *Forests Survive?*, by Drs Gerald Islebe 167–8
Savanna Fires and Seasonal Temperatures: A Case for Research?, by Colin G. Trapnell (fig.) 168–70
Debt-for-Conservation Swaps in Australian Agriculture, by Dr Kevin A. Parton (table) 170–1

Notes, News & Comments:

Are Cranes 'Dancing on the Brink'?, by Prof. Gunavant M. Oza (fig.) 172
International Energy Foundation (IEF) Headquarters Move to Geneva, Professor Peter J. Catania 173
Further Report on the Surrey Docks City Farm in London, England, by Joyce Anstey 173
Roundtable on Environmental Information and Documentation, by Kevin Grose 174
Immigration Policy: Learning from Neighbours, by Rosemary Jenks 174
World Environment Center Gold Medal for International Corporate Environmental Achievement, by World Environment Centre 174–5
The Healing Forest Conservancy, by Katy Moran 175
First Recipient of the Richard Evans Schultes Award, by Katy Moran 176
History of the Environmental Movement and Environmental Conservation, by Roland de Miller 176–7
Sustainability of Siberian Forests, by Professor Sten Nilsson 177
What EYFA Is and Does, by Mariana Kosturkova 178
Increased Stress on the Butterfly Fauna of the Andaman and Nicobar Islands, by Dr T.C. Khatri 178

Conferences & Meetings:

Reports by Nicholas Polunin, Dr Arthur H. Purcell, Professor John L. Cloudsley-Thompson, and Dr Asit K. Biswas; *Important Prospects* by Kathryn Kohm, Radovan Kohout, Vance G. Martin, Dr Jack Greer (fig. p. 192), and Dr Nicholas V.C. Polunin ..... 179–83 & 192

Book Reviews & Notices:

Book Reviews by Senator Professor M. Kassas, Dr Arthur H. Westing, Professor Richard Evans Schultes (3), Professor P.S. Ramakrishnan, and Jiří Guth. *Notices of Books* by Eric C.F. Bird, and Edited by D.S.G. Thomas & R.J. Allison 184–8

Other Books etc. Received During 1992 (held over from Spring issue) 189–92

Environmental Conservation, Vol. 20, Nr 4, Winter 1993 — © 1993 The Foundation for Environmental Conservation — Printed in Switzerland

Nr 3 — Autumn 1993

Editorial Section:

Guest Editorial: *The Geopolitics of Environmental Degradation*, by HE Professor José Goldemberg 193–4
Guest Comment: *Science, Policy, and International Affairs: How Wrong the Great Can Be*, by Professor William A. Nierenberg 195–7
Guest Comment: *Lessons Learned at the World Conference on Human Rights*, by Sangita Wilk-Sanatani 198
Notice: Original Paperbacks: Readers by Leaders 194

Main Papers:

The Earth's Living Matter: Biosphere and Soils, by the late Professor Victor A. Kovda (2 tables) 199–204
Population, Environment, and Development, by Dr Norman Myers 205–16
Contradictions in Sustainability, by Stephen R. Dovers & Dr John W. Handmer 217–22
Analysis of Recent Climatic Changes in the Arabian Gulf Region, by Dr Hassan A. Nasrallah & Professor Robert C. Balling, Jr (4 figs) 223–6
The Adaptational Diversity of Desert Biota, by Professor John L. Cloudsley-Thompson (5 figs) 227–31
Applying Environmental Interpretation in Protected Areas of Developing Countries: Problems in Exporting a US Model, by Professor Sam H. Ham, David S. Sutherland & Dr Richard A. Meganck (2 tables) 232–42
Conservation and Management of Rivers in India: Case-study of the River Yamuna, by Dr Brij Gopal & Malavika Sah (4 figs & 2 tables) ..... 243–54 & 222
Tourism and Short-term Behavioural Responses of Nesting Masked, Red-footed, and Blue-footed, Boobies in the Galápagos, by Professor Joanna Burger & Professor Michael Gochfeld (3 figs & tables) 255–9

Short Communications & Reports:

Protecting Wildlands Through Culturally Compatible Conservation, by Michael Steinberg 260–2
The Impact of Tourism on Nature Reserves in Madagascar: Périnet, a Case-study, by Dr Peter J. Stephenson 262–5
Physical Damage to Corals Caused by Trap-fishing on Reefs of Bonaire, Netherlands Antilles, by Martin van der Knaap (5 figs) 265–7
Air Pollution Modelling Applications in Hungary: Example of Short-term Collaboration between Switzerland and Hungary, by Dr Martin Beniston 267–9

Notes, News & Comments:

The 1993 Blue Planet Prize: Its Two Awards, by Hiroya Hirano (fig.) 270
Fondazione Eni Enrico Mattei, by Professor Domenico Siniscalco 270–1
Global Distinction for INSONA's Environmental Awareness, by Professor Gunavant M. Oza 272
US National Pollution Center for Higher Education, by Vera Siguel 271–2
Ozone Depletion over Antarctica Returns 272–3
ProMed Mission Statement: The Federation of American Scientists' Program for Monitoring Emerging Diseases .. 273–4
New Director-General for WWF, by Leigh Ann Hurt 274
Short Courses on Life-zone Ecology and Tropical Dendrology offered by the Tropical Science Center, San José, Costa Rica, March–May 1994, by Dr Humberto Jiménez Saa 275
Introduction to the Asian Society for Environmental Protection, by Günter Tharun 275
Two More of Our Advisory Editors Share the (1993) Volvo Environment Prize, by Nicholas Polunin 276
Oil-spill Endangers Wildlife, by Professor Gunavant M. Oza 276–7
The Biodiversity Treaty, by Convention on Biological Diversity 277

Conferences & Meetings:

Reports (in chronological order) by Nicholas Polunin (fig.), Marina Pavlova, Dr Asit K. Biswas, Professor Roger H. Charlier (2), Mireille Katz, and Professor John L. Cloudsley-Thompson; *Important Prospects* (in chronological order) by Dr Arun Prakash Mathur, Professor Guy C. Bate, Peter A. Scott, and Robert L.P. Kleinmann 278–83

Book Reviews & Notices:

Book Reviews by Professor Richard Evans Schultes, Dr Norman Myers (2), Professor Samir I. Ghabbour, and Dr Antoinette M. Mannion; *Notice of Book* by Dr Richard Gordon Miller 284–8

Nr 4 — Winter 1993

Editorial Section:

Editorial: *UNESCO Celebrates the 25th Anniversary of the 'Biosphere Conference' and the Birth of Its MAB Programme and Biosphere Reserves* ..... 289 & 292
Guest Editorial: *World Appeal*, by Professor Federico Mayor, Director-General of UNESCO 290
Guest Editorial: *The 'Population Summit'*, by Dr Norman Myers 291–2
Guest Comment: *Plitvice National Park, World Heritage Site, and the Wars in the former Yugoslavia*, by Harold K. Eidsvik (fig.) 293
Guest Comment: *A View from Grand-Saconnex*, by Dr Arthur H. Purcell 294
Updated Publications Notice 295
Notice: [The first of our] *Original Paperback Readers by Leaders* 296

Main Papers:

The Urgent Need for Rapid Transition to Global Environmental Sustainability, by Dr Robert J.A. Goodland, Dr Herman E. Daly & Dr Salah El Sarafy (fig. and 7 tables) 297–309
Reflections on the Principles of Sustainable Agricultural Development, by Dr Uwe Otzen (fig. and table) 310–6
The Fertility Plateau in Costa Rica: A Review of Causes and Remedies, by Karen D. Holl, Dr Gretchen C. Daily & Professor Paul R. Ehrlich (table) 317–23
Statement of the 'Population Summit' of the World's Scientific Academies, held in New Delhi, India, during 24 to 27 October 1993 324–7
Impoverishment, Population, and Environmental Degradation: The Case for Equity, by Dr Stephen C. Lonergan (3 figs) ... 328–34
The Future of the Sahara, by Professor John L. Cloudsley-Thompson 335–8
Simulating Past and Forecasting Future Climates, by Professor Reid A. Bryson (6 figs) 339–46
Variations in Reproductive Parameters of Black-headed Gulls (Larus ridibundus) *Living in Different Conditions in the Czech and Slovak Republics*, by Dr Zusana Guthová (5 figs and 3 tables) 347–51

Short Communications & Reports:

Euglenoid Red-bloom Contributing to the Environmental Pollution of Dal Lake, Kashmir Himalaya, by Dr M.A. Khan (5 figs and table) 352–6
The Vallée de Mai, Praslin, Seychelles, by Professor Michael B. Usher (4 figs) 356–8
Accelerated Soil-erosion in the Pico de Europa, Northern Spain, by Dr Philip M. Haygarth, Christopher Rowley, Samantha Perry & Dr Robert G.H. Bunce (3 figs and table) 358–61
Bradford Declaration on Environmental Education in the Commonwealth, by Dr Walter Leal Filho 362

Notes, News & Comments:

François Bourlière, 1913–93, by Dr Michel Batisse (fig.) 363–4
Convention on Biological Diversity, by Executive Secretary Angela Cropper 364
Small-island States and Low-lying Areas Especially Vulnerable to Climate, Global Warming, and Sea-level Changes 364–5
London Initiative on the Russian Environment, by David Shreeve 365–6
Trapnell Fund for Environmental Field Research in Africa, by Mrs Judith M. Brown 366
Turning-point for South Africa's St Lucia Wetlands?, by Mireille Katz 366
Last Chance to Save Olive Ridley Sea-turtles in India?, by Professor Gunavant M. Oza 377
Pakistan to Protect 'Throne-room of Mountain Gods', by Ricardo Bayón 367–8
The Prague Declaration 368–9
Courses on Life-zone Ecology and Tropical Dendrology Offered by the Tropical Science Center, San José, Costa Rica, by Dr Humberto Jiminéz Saa 369
Bay of Bengal Islands' Population and Environment Future: An Urgent Appeal, by Dr T.C. Khatri 369–70
United Nations' Advisory Board on Sustainable Development ... 370

Conferences & Meetings:

Reports (in chronological order) by Mrs Premlata Oza & Professor Gunavant M. Oza, Dr Bruce C. Forbes, Professor J. Gordon Nelson, Nicholas Polunin (2), and Dr Asit K. Biswas; *Important Prospects* (in chronological order) by Robert Kleinmann, Denis Saunders, Carol Partland, Professor Roger H. Charlier, and Judge Amedeo Postiglione ... 371–6 & 381

Book Reviews & Notices:

Book Reviews by Professor Michael B. Usher, Senator Professor M. Kassas, Professor Samir I. Ghabbour, Professor Richard Evans Schultes, and Marie-Claire P.S.G. Chaineux; *Notices of Books* by Dr D. Sen, A.P. Purandare & Dr P.K. Das, Edited by Edward Dommen, and prepared by Denis Rivard 377–81

Environmental Conservation: Contents of Volume 20, 1993 382–3

Environmental Conservation: Index of Named Contributors to Volume 20 384

ENVIRONMENTAL CONSERVATION:
Index of Contributors to Volume 20

AIKEN, S. Robert 157–62
ANON. 85, 324–7, 364–5, 368–9, 370
ANSTEY, Joyce 173

BAILEY, Robert G. 75–6
BALLING, Robert C., Jr 223–6
BASHKIN, Vladimir N. 75–6
BATE, Guy C. 282
BATISSE, Michel 107–12, 363–4
BAYÓN, Ricardo 367–8
BENISTON, Martin 267–9
BISWAS, Asit K. 180–1, 278–9, 374–5
BROWN, Judith M. 366
BRYSON, Reid A. 339–46
BUNCE, Robert G.H. 358–62
BURGER, Joanna 255–9

CATANIA, Peter J. 173
CHAINEUX, Marie-Claire P.S.G. 379–80
CHANDRAN, M.D. Subash 131–8
CHARLIER, Roger H. 279–80, 281–2, 381
CLARK, Colin 95–6
CLOUDSLEY-THOMPSON, John L. 180, 227–31, 282, 335–8
CONVENTION ON BIOLOGICAL DIVERSITY 277
CROPPER, Angela 364
CURME, Lynn 295, 296

DAILY, Gretchen C. 317–23
DALY, Herman E. 297–309
DANIELS, R.J. Ranjit 131–8
DEARDEN, Philip 149–56
DEMPSTER, William F. 74–5
DIXON, Jean M. 65–73, 121
DOVE, Michael ..... 17–24 & 56
DOVERS, Stephen R. 217–22
DUFFUS, David 149–56

EHRLICH, Paul R. 317–23
EIDSVIK, Harold K. 293

FILHO, Walter Leal 90–1, 92, 362
FORBES, Bruce C. 372–3
FUREDY, Christine 79–82

GADGIL, Madhav 131–8
GAIRDNER, Gillian 50–6
GHABBOUR, Samir I. 285–6, 378–9
GOCHFELD, Michael 255–9
GOLDEMBERG, José 193–4
GOODLAND, Robert J.A. 122–30, 297–309
GOPAL, Brij ..... 243–54 & 222
GREER, Jack 182–3
GROSE, Kevin 174
GUTH, Jiří 186–7
GUTHOVÁ, Zuzana 347–51

HAAS, Jennyfer ..... 143–8 & 162
HAM, Sam H. 232–42
HAMBLER, David J. 65–73, 121
HANDMER, John W. 217–22
HAYGARTH, Philip M. 358–62
HEINEN, Joel T. 25–34
HINDSON, James 85–6
HIRANO, Hiroya 270
HOLL, Karen D. 317–23
HURT, Leigh Ann 274

INFORMATION AND PUBLIC AFFAIRS OFFICE 272–3, 364–5
INTERNATIONAL CHAMBER OF COMMERCE 82–4
INSTITUTE OF MEDICINE 273–4
ISLEBE, Gerald 167–8

JENKS, Rosemary 174
JIM, Chi Yung 35–49
JURAS, Anastacio 122–30

KASSAS, Mohamed 184, 377–8
KATZ, Mireille 280–1, 366
KHAN, M.A. 352–6
KHATRI, T.C. 178, 369–70
KLEINMANN, Robert L.P. 283, 376
KNAAP, Martin van der 265–7
KOHM, Kathryn 181–2
KOHOUT, Radovan 182
KOSTURKOVA, Mariana 178
KOVDA, Victor A. 199–204
LONERGAN, Stephen C. 328–34

MANNION, Antoinette 286–7
MARTIN, Vance G. 182
MATHUR, Arun Prakash 282
MAYOR, Frederico 290
MCNEELY, Jeffrey A. 89
MEGANCK, Richard A. 232–42
MILLER, Roland de 176–7
MONTAGNINI, Florencia 93–4
MORAN, Katy 175, 176
MYERS, Norman 9–16, 205–16, 284–5, 287–8, 291–2

NASRALLAH, Hassan A. 223–6
NELSON, J. Gordon 373–4
NELSON, Mark 74–5
NIERENBERG, William A. 195–6
NIKULIN, Vladimir A. 89–90
NILSSON, Sten 177
NUMATA, Makoto 91

OTZEN, Uwe 310–6
OZA, Gunavant M. 172, 272, 276–7, 367, 371–2
OZA, Premlata 371–2

PACHAURI, Rajendra 122–30
PARTLAND, Carol 376
PARTON, Kevin A. 170–1
PANAYOTOU, Theodore 87
PAVLOVA, Mariana 278
PERRY, Samantha 358–62
POLUNIN, Nicholas ..... 3, 8, 91–2, 97, 101–5, 163–4, 179, 276, 278, 289 & 292, 374, 375
POLUNIN, Nicholas V.C. 183
'POPULATION SUMMIT' 324–7
POSTIGLIONE, Amedeo 381
PRAKASH, Arun 92
PURCELL, Arthur H. 179–80, 294

RAMAKRISHNAN, P.S. 186
RAWAT, Gopal S. 164–7
RICKARD, William H. 57–64
ROCKFELLOW, John 274
ROSEMARIN, Arno 87–8
ROWLEY, Christopher 358–62

SAA, Humberto J. 275, 369
SAH, Malaviki ..... 243–54 & 222
SARGEANT, Glen A. 57–64
SAUNDERS, Denis 376
SCHULER, Carol A. 57–64
SCHULTES, Richard Evans 4, 93, 96, 185–6, 187–8, 284, 379
SCOTT, Peter A. 283
SEAWARD, Mark R.D. 88
SERAFY, Salah El 297–309
SHARMA, Uday R. 139–42
SHAW, R. Paul 113–21
SHAW, William W. 139–42
SHREEVE, David 365–6
SIGUEL, Vera 271–2
SINISCALCO, Domenico 270–1
SINITSINA, J.E. 89–90
STEINBERG, Michael 260–2
STEPHENSON, Peter J. 262–5
SUTHERLAND, David S. 232–42
SWAMINATHAN, Monkombu S. 6–7

TAYLOR, Alan H. 76–9
THARUN, Günther 275
TRAPNELL, Colin 168–70

UNITED NATIONS OFFICE IN GENEVA 85
UNIYAL, Vinod K. 164–7
USHER, Michael B. 94–5, 356–8, 377

WESTING, Arthur H. 5–6, 99–100, 184–5
WILK-SANATINI, Sangita 198
WORLD ENVIRONMENT CENTER 174–5

YANG, Shi 79–82

ZISHENG, Qin 76–9